PRODUCT INFO

DVCAM Editing Player/Recorder
DSR-1500P

Datum: **11/2000**
Ref.- Nr: **2377**

Product Concept

Since its introduction in 1996, DVCAM has established its position as professional production format in B&I market, and acclaimed a high reputation for its excellence in its video/audio quality, editing performances and so on.

Along with a recent rapid increase in popularity of Non-linear editing style, which often requires compactness in system size since the operation is often done with PC in a confined space such as on a desk-top rather than a bigger room dedicated for editing, customers are getting to require smaller size, lower-price but higher performance that has more compatibility in playback format or flexibility in handling signals.
Also, for connection with the Non-linear system, an i.LINK has become one of the popular affordable digital interfaces that handles compressed video/audio signal. A style of 'Non-linear editing via i.LINK' has become a trend in lower-cost editing system. So implementation of i.LINK is imperative for this market.
However, on the other hand, there is another market that requires more higher video/audio quality with base-band signal via SDI. And there is another fact that Non-linear systems with SDI is getting more affordable than ever and becoming closer to a wider range of users.

Therefore, in order to meet such Non-linear market trends, we will introduce DSR-1500P Editing Recorder, targeting a wide range of professional Non-linear system users that require SDI-based operation or may require system upgrade to the SDI in future from current i.LINK or analog system.
However, to offer the DSR-1500P at affordable cost and to introduce it to a wider range of customers, we will provide three kinds of input interface boards, Digital, Analog and i.LINK interfaces, making them all options. So the customers can configure the system depending on their system applications.
Since the input interface boards are all options, the DSR-1500P can also be an affordable compact office viewer, without installing any of the options, at BC stations, boasting DV-family (25Mbps) format playback capability and excellent professional mechanical response and so on.

Sales Points

1. **Compact, yet highly professional inherited from DSR-2000P**
   - Noiseless-smooth Digital Slow within the range of +/-0.5 times normal speed range
   - Noiseless-smooth Jog Audio within the range of +/-0.5 times normal speed range
   - Playback capability of DV (25Mbps) format recorded tapes
   - Frame accurate editing
2. **Playback compatibility with DV Family Format**
   - DVCPRO playback
   - No need for a mechanical cassette adaptor
   - No need for menu change in choosing tape format
3. **Digitally upgradeable with excellent optional I/F boards**
   - SDI, SDTI(QSDI), AES/EBU is available with DSBK-1501
   - i.LINK is available with DSBK-1503
4. **Ideal as Compact viewer**
   - Suitable as a lower-cost office viewer with DV family format playback capability
   - Compact size ideal for desk-top use or installation in OB vehicles

Main Features

1) DVCAM Format
2) Playback capability of DV (25Mbps) Format recorded tapes
3) Compact-Design for Desk-top operation
4) A choice of optional I/F boards for System upgrade
DSBK-1501
DSBK-1503
DSBK-1504P
5) Analog Output as Standard
6) **Excellent Editing Functions**
1. Excellent Digital Slow motion with clear pictures
2. Noiseless and clear Digital Jog Audio
3. Frame accurate editing via RS-422A and i.LINK
4. Instant Start at Designated Point
5. DMC (Dynamic Motion Control) via External controller
6. ClipLink

7) Improvement of Picture Quality
1. SDI multi-generation dubbing quality (PAL)
2. Reduction of Mosaic noises in Panning pictures
3. Picture quality in Slow motion

8) Other Conveniences
1. 16:9 Aspect Ratio
2. Vertical Interval Time Code (VITC)
3. Universal Powering System
4. Flexible Input/Output Selection
5. Convenient Picture Search by 4 arrow keys
6. Audio PB/REC level control
7. Internal Signal Generator (video/audio)
8. Character Generator
9. Closed Caption
10. Rec. Inhibit by Menu
11. Full Tape dubbing with ClipLink Log Data

◆ *Images of Front & Rear panels*

DSR-1500P Front panel

DSR-1500 Rear panel (factory setting)

DSR-1500 Rear panel (with Full options)

Main Features

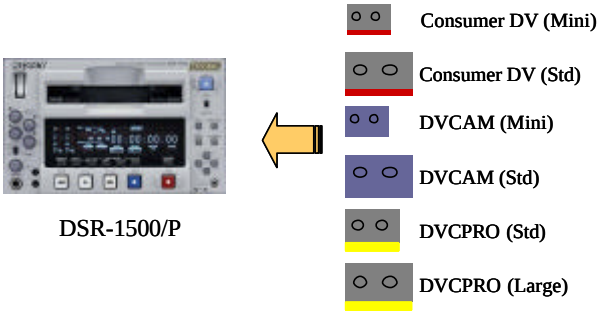
1. DVCAM Format

- **Digital Component Recording Format**
- **4CH/2CH PCM Audio**
- **Maximum 3 hours Recording**

2. Playback Capability with DV Family Formats

The DSR-1500P has an excellent playback compatibility with DV family formats (25Mbps) except DV-LP recorded tapes to offer flexibility in accepting video sources in various types of video editing environment.
The 'DV family formats'*1 include not only DVCAM and DV but also DVCPRO*2 format. Tapes of these formats can be played back in the DSR-1500P without any special mechanical adaptor. Also there is no need for menu changes in choosing the formats. They can be directly inserted, played back and also utilized as editing sources. The editing functions such as Digital slow motion, jog audio and DMC are available regardless of the tape formats. This means even when using the DV or DVCPRO recorded tapes as editing sources, there is no need to dub up to other higher format, which is often required on DVCPRO VTR.
*1: Unlike the DSR-2000, the DSR-1500P does not accept the DV-LP-recorded tape since they do not employ narrow-pitch heads for the DV-LP playback. The DSR-1500P playbacks thin consumer DV tapes (SP mode).
*2: DVCPRO output is not available with SDTI (QSDI) and i.LINK due to differences in construction of AUX data. For PAL area, the difference in video sampling also contributes to this inability.

Playback compatibility in DSR-1500P



DSR-1500/P

3. Compact Design

The DSR-1500P employs highly compact unit size of half-rack width and 3-unit height so that it can be ideally used as an editor/feeder machine for desk-top nonlinear editing systems, or installed in confined spaces such as OB vehicles and so on.

4. A Choice of optional Interface Boards for System upgrade

The DSR-1500P has an excellent lineup for 3 optional interface boards for system upgrade. With these options available, the DSR-1500P can be upgraded from an affordable feeder to a complete professional editor. All the 3 boards can be installed simultaneously.

- DSBK-1501 Digital Input/Output Board
  - SDI, SDTI(QSDI), AES/EBU are available
  - Due to limitation of space of its rear panel, interface terminals for SDI and SDTI(QSDI) are commonly used. Either the SDI or the SDTI(QSDI) output is selectable by menu. However, the input of SDI or SDTI(QSDI) is selectable in the front panel. Therefore, input and output can be independently selected.

- DSBK-1503 i.LINK/DV Input/Output Board
  - 6-pin connector is provided.

- DSBK-1504P Analog Input Board
  - Component, Composite, S-video (Y/C) are provided as video input
  - Terminals for the component, composite and S-video are commonly used. Input selection is operated on the front panel.
  - 2 channels of XLR audio are also provided as audio input.

5. Analog Output as Standard

As mentioned in the above, the DSR-1500P requires optional input boards to configure it to become an editing recorder. However, the DSR-1500P has Component, Composite, S-Video (Y/C) outputs for video as standard and 2 channels analog output via XLR for audio. Therefore, without attaching any of optional input boards, the DSR-1500P works as an ideal affordable feeder or viewer with playback compatibility of a variety of DV (25Mbps) family formats.

6. Excellent Editing Functions

- **Excellent Digital Slow Motion**
  The DSR-1500P boasts excellent noiseless slow motion within the range of –0.5 to +0.5 times normal playback speed, in increments of 1%, making it easy to designate editing points. This range is effective for all DV formats (25Mbps) that are acceptable on the DSR-1500P.

- **Excellent Digital Jog Sound**
  The DSR-1500P offers excellently smooth and clear performance of jog sound within the provided range of –0.5 to +0.5 times normal playback speed, just like we have experienced in analog VTR. This allows easier decision of editing points listening to the audible jog sound. This will be of a great weapon to appeal to ENG markets that often relies on jog audio in news editing application. This excellence is effective for all DV family formats (25Mbps) the DSR-1500P accepts.

- **Frame accurate editing via RS-422A or i.LINK**
  The DSR-1500P is equipped with an RS-422A remote control interface (9-pin) to interface with Sony EditStations, Sony VTR and editing controllers. Equipped with an optional DSBK-1503 i.LINK/DV Input/Output Board, i.LINK-based control is also available. Frame accurate editing is possible in both cases.

- **Instant Start at Designated Point**
  The DSR-1500P boasts immediate and precise start-up when changing operational modes especially from STILL to PLAY modes.

- **DMC (Dynamic Motion Control) via External controller**
  Being controlled by an external editing controller, the DSR-1500P provides noiseless slow-motion pictures within the range of –0.5 to +0.5 time normal speed.
  Note: The DMC is not available through i.LINK since minute speed control is impossible via these interfaces.

- **ClipLink**
  The DSR-1500P supports the ClipLink function. Being integrated in a NLE system with EditStations, the DSR-1500P plays an active role by sending the ClipLink information data onto the EditStations to provide great efficiency through the whole editing process.
  Also, the DSR-1500P has a capability of full tape dubbing with ClipLink Log Data either through i.LINK or a combination of SDTI (QSDI) + RS-422A.
  Note: ClipLink Operation is not available. The following functions are not supported;
  'Cue up to MARK IN/CUE Address', 'Change MARK IN/OUT', 'Change OK/NG status and REEL No.' and 'Create New MARK IN & OUT'.

7. Improvement in Picture Quality

- **SDI Multi-generation dubbing quality** (PAL only)
  Due to employment of newly developed algorithm filter, color blurring that has been annoying in SDI dubbing with a conventional model of DSR-80P is extremely reduced in the DSR-1500P.

- **Reduction of Mosaic noises in Panning pictures**
  By improving DCT motion detector, the DSR-1500P offers improvement in picture quality especially in viewing panning pictures.
  For example, when watching the panning pictures, tiny block noises are reduced. It is more striking when you compare them with multi-generation pictures.

- **Picture quality in Slow motion**
  Employing the same Y-Add filter as the one that has been used in Digital Betacam or Betacam SX VTR, the DSR-1500P offers smooth digital slow motion picture by greatly reducing vertical vibration. The difference of picture stability between DSR-1500P and DVCPRO is also apparent especially comparing in the range of less than 0.5 times normal speed.

5. Other Conveniences

- **16:9 Aspect Ratio**
  The DSR-1500P has capability of recording and playing back the 16:9 aspect ratio pictures shot by DXC-D35WSP + DSR-1P, DSR-500WSP or DSR-200AP by receiving a wide aspect ID pulse signal as video auxiliary data which indicates the picture is shot in the 16:9 aspect ratio. Furthermore, the wide aspect ID can be added or removed.

- **VITC (Vertical Interval Time Code)**
  The DSR-1500P supports not only Time Code in sub code area on a tape but also Vertical Interval Time Code (VITC) through all video signal interfaces.
  When receiving video signal with the VITC, the DSR-1500P reads and records (when optional input boards are installed.) it in video auxiliary data area. The VITC is output by being inserted on video signal. Also, the Time Code in sub code area can be output as the VITC.
  The VITC facilitates cable-handling enabling copying video signal and TC (Time Code or VITC) with just a single BNC cable via composite or SDI, or allows users to record other time code data in video auxiliary data area in addition to the Time Code, which is helpful especially for off-line editing.

- **Video Control (Process Control)**
  The DSR-1500P is equipped with a built-in Video Controller for the output of highly stable analog and digital video signals, which is available by menu operation.
  With the Video Control, Video level, Chroma level, Chroma phase (hue)*, Sync phase, SC phase and Set up (black) for composite, S-video, component and SDI outputs can be controlled. Adjustment of the Sync phase and the SC phase is available also on its front panel.
  *: Following precedent Betacam SX and Digital Betacam VTR, there is a difference in the function name between UC/J and CE models as follows;

UC and J models:	Chroma phase (hue)
CE model:	Chroma phase

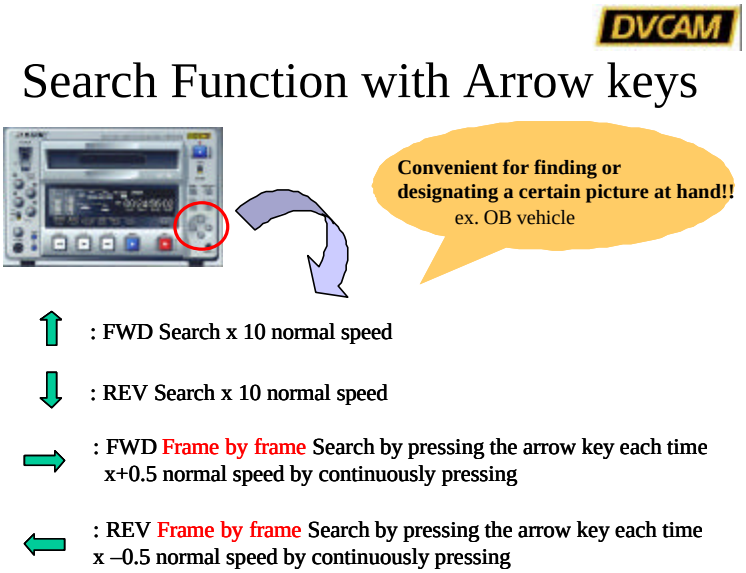
- **Universal Powering System**
  The DSR-1500P employs the universal powering system to handle AC 100V to 240V. This system allows users to bring and use the DSR-1500P anywhere around the world without a transformer*.
  * Please note that the safety regulations of the DSR-1500P are taken per model (UC 2, CED, J).

- **Flexible Input/Output Selection**
  The DSR-1500P has flexibility in input (when optional input boards are installed) and output selection, which enables various combinations of video and audio inputs and outputs.
  However, there are limitations in the following cases;
  i. LINK: No combination with other I/F
  SDTI (QSDI) for Audio: When SDTI (QSDI) is selected for audio, video signal is determined to be SDTI (QSDI). However, when SDTI (QSDI) is chosen for video, other I/F can be chosen for audio.

Video	i.LIN	SDTI(QSDI	SDI	AES/EBU	XLR
i.LIN	Yes	No	No	No	No
SDTI(QSDI	No	Yes	No*	Yes	Yes
SDI	No	No	Yes	Yes	Yes
Componen	No	No	Yes	Yes	Yes
Composit	No	No	Yes	Yes	Yes
S-video	No	No	Yes	Yes	Yes

* This combination is not available since the interface terminal is commonly used between them

- **Convenient Picture Search by 4 Arrow Keys**
  The DSR-1500P provides picture search function by using the 4 arrow keys on its front panel. By pressing right and left arrow keys, search speed of 10 times normal speed is available in forward and reverse. Pressing up and down keys allow frame-by-frame picture search in both forward and reverse. Also, by pressing the up and the down keys continuously, picture search at 0.5 times normal speed is available. This function makes it easy for operators, e.g. in OB vehicle applications of BC stations, to check and designate pictures at hand before sending them to main stations.


DVCAM
Search Function with Arrow keys
Convenient for finding or designating a certain picture at hand!!
ex. OB vehicle
: FWD Search x 10 normal speed
: REV Search x 10 normal speed
: FWD Frame by frame Search by pressing the arrow key each time x+0.5 normal speed by continuously pressing
: REV Frame by frame Search by pressing the arrow key each time x –0.5 normal speed by continuously pressing

- **Audio PB/REC Level Control**
  The DSR-1500P has audio PB/REC level control function with the control knobs on the front panel, which should be useful in ENG application where users want to adjust audio level in sending the audio signal from e.g. OB vehicle to the main station.

- **Max. 2 Cue-up points can be assigned on VTR itself**
  By using the arrow keys, any desired tape position as A or B (max. two points) can be set and also cued up to these points on the DSR-1500P itself (Any editing controller is NOT required.) To cue up to the point A or B, holding down the left key for A or right key for B on the menu control panel, press the REW button in the tape transport control section.

- **Internal Signal Generator**
  The DSR-1500P incorporates an internal signal generator. The indicator generates Color bar (Full-field/NTSC: 75% color bar, PAL: 100% / 75% color bar) or Black burst for video and 1kHz or No sound for audio. This function is convenient for making a pre-striped tape before editing.

- **Character Generator**
  The DSR-1500P has a built-in character generator, which superimposes characters on the video signal output. Time code data (TC, User bit), VTR operation status, menu items and all alarm, warning and error messages can be shown in a monitor display.

- **Closed Caption (UC and J models only)**
  Available from both SDI and analog interfaces.
- **Rec. Inhibit by Menu**
- **Full tape dubbing with ClipLink Log Data**

6. Excellent Mechanical Design

- **Three-positioning Cassette Compartment**
  The DSR-1500P employs the tree-positioning cassette compartment for accepting DVCPRO M-size cassette tapes in addition to standard size and mini sizes of consumer DV, DVCAM and DVCPRO. Therefore, there is no need to use a mechanical adaptor to playback the DVCPRO M-size tape.

- **Responsive mechanism**
  The DSR-1500P allows highly responsive operation, which is an essential requirement for professional video production environment. The DSR-1500P provides this through the use of a reliable direct reel and drum mechanism.

◆ *Specifications*

General

Power requirements:	AC 100V – 240V, 50 – 60Hz
Power consumption:	60W (with all options)
Operating temperature:	5? - +40? (41? – 104?)
Storage temperature:	-20? - +60? (-4? - +140?)
Operating relative humidity:	Less than 80%
Storage relative humidity:	Less than 90%
Mass:	6kg (13 lb 3 oz) (DSR-1500P without options)

Tape Transport Control System

Tape speed:	28.221mm/s (DSR-1500P)
Recording/Playback time:	Standard size: 184 minutes (PDV-184ME)
	Mini size: 40minutes (PDVM-40ME)
FF/REW time:	Standard size: Less than 3 minutes
	Mini size: Less than 1 minute
Search speed:	Max. 85 times normal speed, forward and reverse via RS-422A

Video Performance

Bandwidth (via analog component):

Luminance:	PAL: 25Hz to 5MHz +1.0/-1.5dB
Chrominance:	PAL: 25Hz to 2.0MHz +1.0dB/-2.0dB
	S/N Ratio (via analog component out):
Luminance:	More than 55dB
K-factor:	2.0% or less (K2T, KPB)
Y/C delay:	Less than 30ns

Audio Performance

Frequency response:

2CH mode (48kHz/16bits)	20Hz to 20kHz +/-1.0dBdB
4CH mode (32kHz/12bits)	20Hz to 14.5kHz +/-1.0dB

Dynamic range:	More than 87dB
Distortion (THD + N):	Less than 0.07% (at 48kHz mode)

Input Signals (when optional boards installed)

<VIDEO>

ANALOG

REF. VIDEO	BNC x2, loop-through Black burst: 0.3Vp-p, 75? Sync negative
VIDEO (w/DSBK-1504)	BNC x2, loop-through, composite, 1.0Vp-p, 75? , sync negative
Component (w/DSBK-1504P)	BNC x3 Luminance: 1.0Vp-p, 75? , sync negative Chrominance: 0.7Vp-p, 75? (100% color bars)
S-video (w/DSBK-1504P)	BNC x2 Y: 1.0Vp-p, 75? C: 0.3Vp-p, 75? (Burst level)

DIGITAL

SDI	With optional DSBK-1501 BNC x1, conforms to Serial Digital Interface format (270Mbps)
SDTI (QSDI)	With optional DBK-1501 BNC x1, conforms to SDTI (270Mbps) SMPTE 305M/322M
i.LINK	With optional DSBK-1503 IEEE-1394-based, 6-pin x1

<AUDIO>

ANALOG

AUDIO	XLR 3-pin, female x2, +4/0/-3/-6dBu (selectable by menu), high impedance (DSR-1500P)

DIGITAL

AES/EBU	With optional DSBK-1501 BNC x2, AES-3id-1995 conformed

Output Signals

<VIDEO>

ANALOG

VIDEO OUT 1, 2, 3 (SUPER)	BNC x3, composite, 1.0Vp-p, 75? , sync negative
Component	BNC x3, Y: 1.0Vp-p, 75? , sync negative R-Y: 0.7Vp-p, 75? (100%) B-Y: 0.7Vp-p, 75? (100%)
S-video	BNC x2, Y: 1.0Vp-p, 75? , sync negative C: 0.3Vp-p (DSR-1500P), 75? (burst level)

DIGITAL

SDI	With optional DSBK-1501 BNC x2, conforms to Serial Digital Interface format (270Mbps)
SDTI (QSDI)	With optional DBK-1501 BNC x2, conforms to SDTI (270Mbps) SMPTE 305M/322M
i.LINK	With optional DSBK-1503 IEEE-1394-based, 6-pin x1

<AUDIO>

ANALOG

AUDIO OUT	XLR 3-pin, female x2,+4/0/-3/-6dBu (selectable by menu), 600? balanced
MONITOR OUT	Phono jack x1, -8 to -9.0dBu, 47k? , unbalanced (-18dB)

HEADPHONE	Stereo phone jack, -8 to –11dB, 8? , unbalanced (-18dBs)
DIGITAL	
AES/EBU	With optional DSBK-1501 BNC x2, AES-3id-1995 conformed

Time code

Time code In	BNC x1, EBU time code, 0.5Vp-p to 18Vp-p, 3k? , unbalanced
Time code Out	BNC x1, EBU time code , 2.2Vp-p, 75? , unbalanced

Remote

RS-422A	9-pin D-sub connector x1, female
i.LINK	With optional DSBK-1503 IEEE-1394, 6-pin x1
CONTROL S (SIRCS)	Stereo mini jack x1

Supplied Accessories

AC power code x1
Operating Instructions x1

Optional Accessories

DSBK-1501	Digital Input/Output Board
DSBK-1503	i.LINK/DV Input/Output Board
DSBK-1504	Analog Input Board
RCC-5G/10G/30G	9-pin remote control cable (length: 5m (16 ft), 10m (33 ft), 30m (98 ft))
CCF-3L/CCFD-3L	DV cable (6-pin/6-pin to 4-pin)
DSRM-10	Remote Control Unit
Digital Videocassette	Standard size: PDVM-64ME/94ME/124ME/184ME Mini size: PDVM-12ME/22ME/32ME/40ME
Cleaning cassette	DV12CL (standard size), DVM12CL (mini size)

********** APPENDIX **********

- **Comparison chart**

	DSR-1500P	DSR-40P	AJ-D250P
General			
Recording time	Max 3 hours	Max 3 hours	Max 3 hours
Cassette size	Std/Mini/M* * M-size cassette tape (= DVCPRO recording) is available only for playback and it cannot be used for recording in DVCAM format.	Std/Mini	Std/Mini*/M * Needs a special adaptor
DV compatibility	Direct	Direct	Needs special adaptor
DV Playback	SP	SP	SP
DVCAM Playback	Yes	Yes	No
DVCPRO playback	Yes	No	Yes
Universal powering	Yes	No	No
Power consumption	60W	40W	56W
Weight	6kg (13 lb 3 oz)	5.0kg (11 lb)	6.5kg (14.3 lb)
Unit size	3U	2U	2U
Audio channel	4 ch/2 ch	4 ch/2 ch	2 ch

Search speed	0 to 60 selectable	x+/- 1/10, 1/5, 1, 2, approx.10, approx.14 (x17 for PAL)	x10
FF/REW	x85	Less than 2 min. using PDV-184ME	Within 5 min. using AJ-5P92LP (184 min.-tape)
Editing functions			
VTR-to-VTR edit control	No	No	No
Insert Editing	Yes	No	Yes
Assemble Editing	Yes	Yes	Yes
Search by menu key	Yes	No	No
(Digital) slow range	x±0.5	x+/- 1/10, 1/5	?
Jog Audio (digital)	Yes Excellent (DVCAM/DV/DVCPRO)	Yes	Poor
Mechanical response	Excellent	Good	Good
Control panel extension	No	No	No
Color framing	No	No	No
Wide ID rec	Yes	No	No
Audio cross fade	No	No	No
Audio REC level control	Yes	Yes	Yes
Audio PB level control	Yes	No	No
Audio MIX/SWAP	No	No	No
Internal SG	Yes	No	No
Process control (equipped)	Yes (by MENU)	No	No
DMC	No	No	No
Pre-read edit	No	No	No
Sound-on-Sound	No	No	No

Para run	Yes	No	?
Sync Play	No	No	?
REC Inhibit	Yes (by MENU)	No	No
Key Inhibit	No	No	No
ClipLink	Yes	No	No
OSD display	Composite + English	Composite + English	?
CH condition	No	No	No
Time code			
VITC on/off	Yes	No	?
Type of TC	Both VITC and TC	TC	TC
Interface (Input)			
SDI	Yes (option)	No	No
SDTI(QSDI)	Yes (option)	No	No
i.LINK	Yes (option)	Yes	No
AES/EBU	Yes (option)	No	No
Component (BNC)	Yes (option)	No	No
Composite	Yes (option)	Yes	Yes
S-Video	Yes (option)	Yes	Yes
XLR audio	Yes (option)	No	No

TC Input	BNC	No	No
TBC remote	No	No	No
RS-422A	Yes (x1)	Yes (x1)	Yes (option)
SIRCS	Yes (x1)	Yes (x1)	Wired remote
RS-232C	No	No	Yes
Interface (Output)			
SDI	Yes (option)	No	No
SDTI(QSDI)	Yes (option)	No	No
i.LINK	Yes (option)	Yes	No
AES/EBU	Yes (option)	No	No
Component (BNC)	Yes	Yes	No
Composite	Yes	Yes	Yes
S-Video	Yes	Yes	Yes
XLR audio	Yes	Yes	No
TC Out	BNC	No	No

- **Major limitations on DSR-1500P**
  - **Audio MONITOR out synchronize with PHONES level**
  - **No Audio Cross fade**
  - **No –60dB available for microphone input**
  - **System delay due to no implementation of pre-read head**
  - **+/-2 frames (with DVCPRO recorded tape) or +/-1 frame (with DV/DVCAM recorded tape) of editing accuracy in case of using COUNTER MODE.**

- **Most recommendable applications**
  - **Editor & Feeder in Linear Editing system**
    DSR-2000P: **Good**, but expensive
    DSR-1800P/1600P: **Best!**
    DSR-1500P: **Good**, but inconveniences: frame delay in voice-over, no independent audio editing

  - **Editor & Feeder in Non-Linear Editing system**
    DSR-2000P: **Good**, but too expensive
    DSR-1800P/1600P: **Better**

DSR-1500P: **Best!** Desk-top size and affordable

✧ **VTR-to-VTR editing**

DSR-2000P: **Best!**
DSR-1800P/1600P: **NG.** Needs external controller.
DSR-1500P: **NG.** Needs external controller.

✧ **Players in Cart machine**

DSR-2000P: **Good,** but too much
DSR-1800P/1600P: **Best!** (DSR-1600P)
DSR-1500P: **NG**

✧ **Source receiver with search dial in Feed-room at BC stations**

DSR-2000P: **Best!**
DSR-1800P/1600P: **Best!**
DSR-1500P: **Good,** but needs optional search dial for more convenience

✧ **Source viewer/feeder with search dial in BC station**

DSR-2000P: **Good**, though needs bigger space, too expensive. But better since DV-LP is available
DSR-1800P/1600P: **Better,** though DV-LP is not available. Smaller and lower cost than DSR-2000P
DSR-1500P: **Best!** Though DV-LP is not available

- **Setting on an Editing Control Unit**

For DSR-1500P

PVE-500

No settings are required.

BVE-600/900/910/2000 (NTSC model) or FXE-100/120

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
80	17	00	96	05	05	03	80	0A	08	FE	00	80	5A	FF

BVE-600/900/910/2000 (PAL model) or FXE-100P/120P

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
81	17	00	7D	05	05	02	80	0A	07	FE	00	80	4C	FF

RM-450/RM-450CE

*** Left switches**

7	6	5	4	3	2	1	0
OFF	-	-	OFF	-	-	-	-

*** Right switches (RM-450)**

7	6	5	4	3	2	1	0
OFF	-	OFF	ON	OFF	OFF	ON	ON

*** Right switches (RM-450CE)**

7	6	5	4	3	2	1	0
ON	-	OFF	ON	OFF	OFF	ON	ON

BVE-800

*** SW2**

1	2	3	4	5	6	7	8
ON	OFF	ON	ON	-	ON	ON	-

*** SW3 (NTSC model)**

1	2	3	4	5	6	7	8
ON	ON	ON	OFF	-	ON	OFF	OFF

*** SW3 (PAL model)**

1	2	3	4	5	6	7	8
OFF	OFF	OFF	ON	-	ON	OFF	OFF